

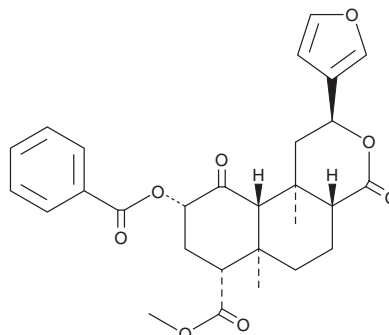
PRODUCT INFORMATION



Herkinorin

Item No. 20925

CAS Registry No.: 862073-77-6
Formal Name: (2S,4aR,6aR,7R,9S,10aS,10bR)-9-(benzoyloxy)-2-(3-furanyl)dodecahydro-6a,10b-dimethyl-4,10-dioxo-2H-naphtho[2,1-c]pyran-7-carboxylic acid, methyl ester
MF: C₂₈H₃₀O₈
FW: 494.5
Purity: ≥98%
UV/Vis.: λ_{max}: 228 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Herkinorin (Item No. 20925) is an analytical reference standard that is functionally categorized as an opioid. It is a natural neoclerodane diterpene from *S. divinorum* that preferentially activates the μ-opioid receptor.^{1,2} Unlike the peptide DAMGO (Item No. 21553), herkinorin activates μ-opioid receptors without inducing arrestin-mediated receptor internalization.^{1,3} Herkinorin has antinociceptive effects in rats.⁴ It has been identified as a novel psychoactive substance in multiple agitated emergency department patients screened in a non-targeted manner.⁵ This product is intended for research and forensic applications.

References

1. Groer, C.E., Tidgewell, K., Moyer, R.A., *et al.* An opioid agonist that does not induce μ-opioid receptor-arrestin interactions or receptor internalization. *Mol. Pharmacol.* **71**(2), 549-557 (2006).
2. Holden, K.G., Tidgewell, K., Marquam, A., *et al.* Synthetic studies of neoclerodane diterpenes from *Salvia divinorum*: Exploration of the 1-position. *Bioor. Med. Chem. Lett.* **17**(22), 6111-6115 (2007).
3. Xu, H., Partilla, J.S., Wang, X., *et al.* A comparison of noninternalizing (herkinorin) and internalizing (DAMGO) μ-opioid agonists on cellular markers related to opioid tolerance and dependence. *Synapse* **61**(3), 166-175 (2007).
4. Lamb, K., Tidgewell, K., Simpson, D.S., *et al.* Antinociceptive effects of herkinorin, a MOP receptor agonist derived from salvinorin A in the formalin test in rats: new concepts in mu opioid receptor pharmacology: from a symposium on new concepts in mu-opioid pharmacology. *Drug Alcohol Depend.* **121**(3), 181-188 (2012).
5. Lung, D., Wilson, N., Chatenet, F.T., *et al.* Non-targeted screening for novel psychoactive substances among agitated emergency department patients. *Clin. Toxicol. (Phila)* **54**(4), 319-323 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM